

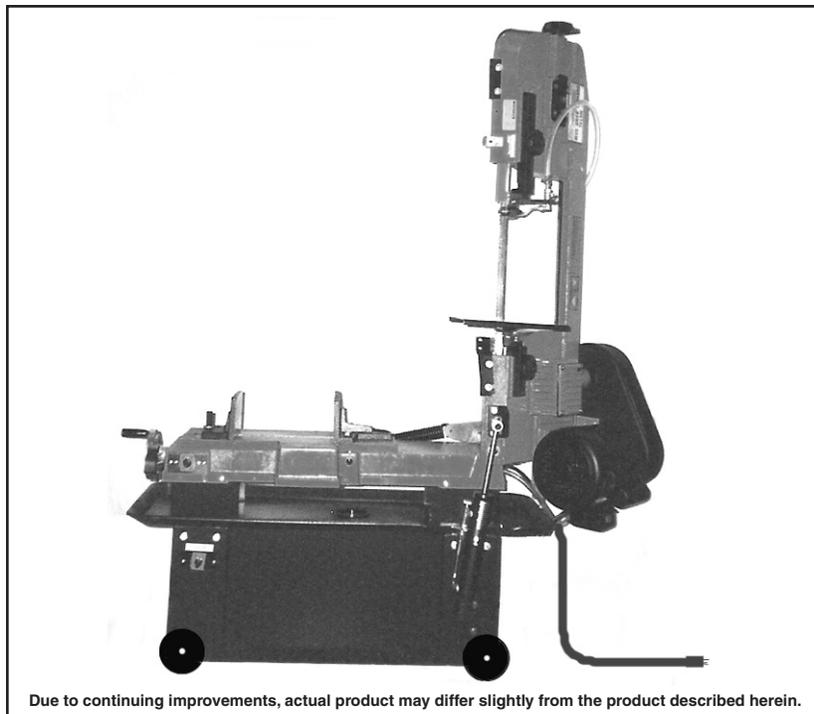
# CENTRAL MACHINERY

®

## 7" X 12" METAL CUTTING BANDSAW

Model 93507

### ASSEMBLY AND OPERATING INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011  
Visit our Web site at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,  
READ AND UNDERSTAND ALL WARNINGS  
AND INSTRUCTIONS BEFORE USE.**

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**For technical questions, please call 1-800-444-3353.**

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## PRODUCT SPECIFICATIONS

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Electrical Requirements	120/230 VAC (Dual voltage capability) Motor Type: 1 HP /Single Phase 60 Hz / 1720 RPM 9 Amps @ 120 Volt 4.5 Amps @ 230 Volt Power Cord Type & Length Provided: 120 volt / 6'4" Long Power Cord Plug Type Provided: 120 volt, 3-Prong Overload Equipped: Resettable Circuit Breaker
Cutting Capacity	7" (Round Stock) 7" x 12" (Flat/Square Stock)
Blade Speeds (FPM)	260 / 178 / 132 / 86
Required Blade Size	3/4" Wide x .032" Thick x 93" Long (Included)
Required V-Belt Size	3V-270 (Included)
Vise Capacity/Miter Angles	10-1/2" / 0-45 Degrees in 1 Degree Increments (Right Only)
Throat Depth	9-5/8"
Coolant Pump	120 VAC / 60 Hz / 0.6 Amps
Coolant Tank Capacity	9 Quarts
Overall Dimensions	15-1/2" Long x 46-1/2" Wide x 62-7/8" High
Net Weight	312 Pounds

### SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

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## GENERAL SAFETY RULES

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**READ AND UNDERSTAND ALL INSTRUCTIONS**  
**Failure to follow all instructions listed below may result in**  
**electric shock, fire, and/or serious injury.**  
**SAVE THESE INSTRUCTIONS**

### WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

## ELECTRICAL SAFETY

1. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
2. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
3. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
4. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
5. **Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
6. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

## PERSONAL SAFETY

1. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2.  **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.

4. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
6. **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

## TOOL USE AND CARE

1. **Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
2. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
4. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
8. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

## SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual.**

Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

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## SPECIFIC SAFETY RULES

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1. **Maintain labels and nameplates on the Bandsaw.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2.  **Always wear safety impact eye goggles and heavy work gloves when using the Bandsaw.** Using personal safety devices reduce the risk for injury. Safety impact eye goggles and heavy work gloves are available from Harbor Freight Tools. Heavy work boots, along with other work clothing, are also recommended during use.
3. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
4. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Bandsaw.
5. **Do not force the Bandsaw.** This tool will do the work better and safer at the speed and capacity for which it was designed. Do not force the Saw Blade into the workpiece being cut.
6.  **WARNING!** Keep hands and fingers away from cutting area and Saw Blade.
7. **Never leave the Bandsaw unattended when it is plugged into an electrical outlet.** Turn off the tool, and unplug it from its electrical outlet before leaving.
8. **Make sure the Bandsaw is located on a flat, level, sturdy surface capable of supporting the weight of the Saw and workpieces.** Always “chock” the Wheels to prevent the Bandsaw from accidentally moving.
9. **Make sure the Table of the Bandsaw and surrounding area are clear with the exception of the workpiece to be cut.**
10. **Before using the Bandsaw, check to make sure the Saw Blade is properly mounted and is not cracked or bent.**
11. **Industrial applications must follow OSHA guidelines.**
12. **Never stand on the Bandsaw.** Serious injury could result if the Bandsaw is tipped or if the rotating Saw Blade is accidentally contacted.
13. **Never attempt to cut more than one workpiece at a time.**

14. **Never attempt to cut freehand.** Make sure the workpiece to be cut is pressed firmly against the Table and/or secured in the Vise.
15. **When cutting a large workpiece, make sure its entire length is properly supported.** If necessary, use a roller stand (not included).
16. **Do not lean on the Bandsaw when the tool is in its upright position.**
17. **When moving the Bandsaw, always have its Head lowered to its horizontal position.**
18. **Allow the Saw Blade to rotate to full speed before feeding a workpiece into the Blade.** When turning off the Bandsaw, allow the Saw Blade to spin down and stop on its own. Do not press against the Saw Blade to stop it.
19. **To avoid accidental injury, always wear heavy duty work gloves when changing the Saw Blade.**
20. **The Saw Blade will become hot while cutting.** Allow the Saw Blade to completely cool before handling.
21. **Do not force the workpiece into the Saw Blade when cutting.** Apply moderate pressure, allowing the Saw Blade to cut without being forced.
22. **Turn off the Bandsaw and allow the Saw Blade to completely stop if the Saw Blade is to be backed out of an uncompleted cut.**
23. **Never attempt to remove material stuck in the moving parts of the Bandsaw while it is plugged in and running.**
24. **Make sure the workpiece to be cut off has sufficient room to move sideways.** Failure to do so may result in offcut binding against the Saw Blade.
25. **Always unplug the Bandsaw from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.**
26. **Keep this product and all other tools and equipment away from children and animals.** Do not allow spectators in the work area.
27. **Keep all safety guards in place and in proper working order.**
28. **This Bandsaw is designed for indoor use only.**
29.  **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated

area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

30.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
31.  **WARNING!** The warnings and cautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

## SAVE THESE INSTRUCTIONS

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### GROUNDING

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 **WARNING!**

**Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.**

### GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**



3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**

THIS PRODUCT  
USES A  
3-PRONG PLUG

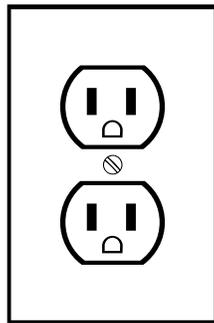


FIGURE A

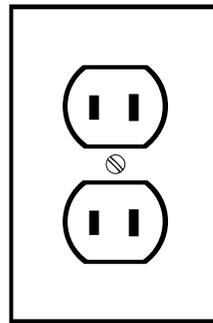
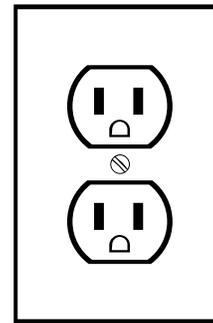


FIGURE B



### **DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS**

1. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**
2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Figure B.)**

### **EXTENSION CORDS**

1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figure C, next page.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figure C.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure C.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Figure C.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.

7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

<b>RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS*</b> <b>(120 OR 240 VOLT)</b>					
<b>NAMEPLATE AMPERES (at full load)</b>	<b>EXTENSION CORD LENGTH</b>				
	<b>25 Feet</b>	<b>50 Feet</b>	<b>75 Feet</b>	<b>100 Feet</b>	<b>150 Feet</b>
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

**FIGURE C** \* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

### SYMBOLGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
V~	Volts Alternating Current
A	Amperes
n <sub>0</sub> xxxx/min.	No Load Revolutions per Minute (RPM)

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## UNPACKING

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When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

1. **NOTE:** For this procedure, you will need the assistance of additional personnel and an adequate lifting device (not included).
2. Remove the box surrounding the Bandsaw using appropriate tools, being careful not to injure yourself from sharp fasteners.
3. Search for and remove all bolts securing the Bandsaw to the pallet.  
**WARNING: At this point the Bandsaw could easily tip, causing serious injury. Have assistants stabilize the bandsaw.**
4. Use the lifting device to lift the Bandsaw off the pallet and set it on a flat location on the floor that is capable of properly supporting its weight.

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## ASSEMBLY INSTRUCTIONS

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**NOTE:**

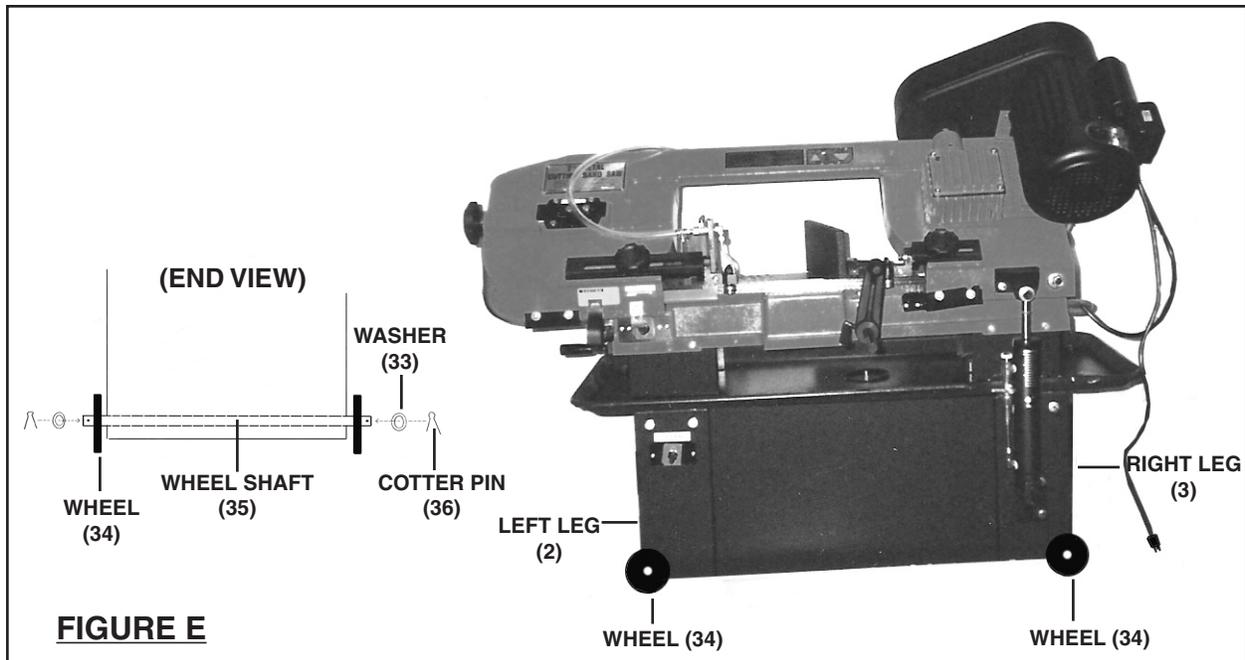
For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagrams on pages 32 and 33.**

 **WARNING!** Always make sure the Toggle Switch (11) for the Bandsaw *and* the Toggle Switch (37) for the Coolant Pump are both in their “**OFF**” position and the tool is unplugged from its electrical outlet prior to assembling the tool, adding any accessories, or making adjustments to the tool.

### A - Attach The Wheels

**Note:** For this procedure, you will need the assistance of additional personnel and an adequate lifting device (not included).

1. Use the lifting device to raise the Left Leg (2) of the Bandsaw about six inches off the floor. Once the Left Leg is lifted, insert a Wheel Shaft (35) through the two holes located at the bottom of the Left Leg.
2. Slide one Wheel (34) on each end of the Wheel Shaft. Place one Washer (33) on each end of the Wheel Shaft. Insert one Cotter Pin (36) through the hole in each end of the Wheel Shaft. Then, make sure to bend the Cotter Pins to secure the Wheels in place. **(See Figure E.)**
3. Repeat Steps #1 & 2 for the Right Leg (3), remaining Wheel Shaft (35), and remaining Washer (33) and Cotter Pin (36). **(See Figure E.)**



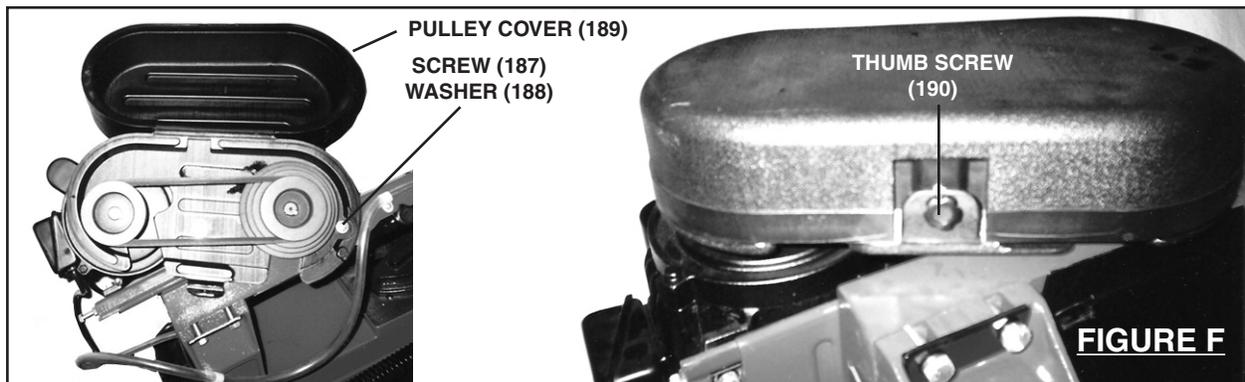
**FIGURE E**

### **B - Remove The Shipping Bolt**

1. Turn the lever on the Hydraulic Cylinder (20) to the “**OFF**” (horizontal) position.
2. Remove Hex Head Screw (170) that holds the Bracket (172) to the Saw Arm. Save this Screw for any future transport.
3. Check that the Saw arm prevents the Toggle Switch (37) from entering its “**ON**” position. If it does not, adjust the Stop Screw (60) to lower the Saw Arm until it does.
4. Make certain that the blade cannot contact the table with the Saw Arm lowered completely. If it can, adjust the Stop Screw (60) to raise the Saw Arm.

### **C - Attach The Pulley Cover**

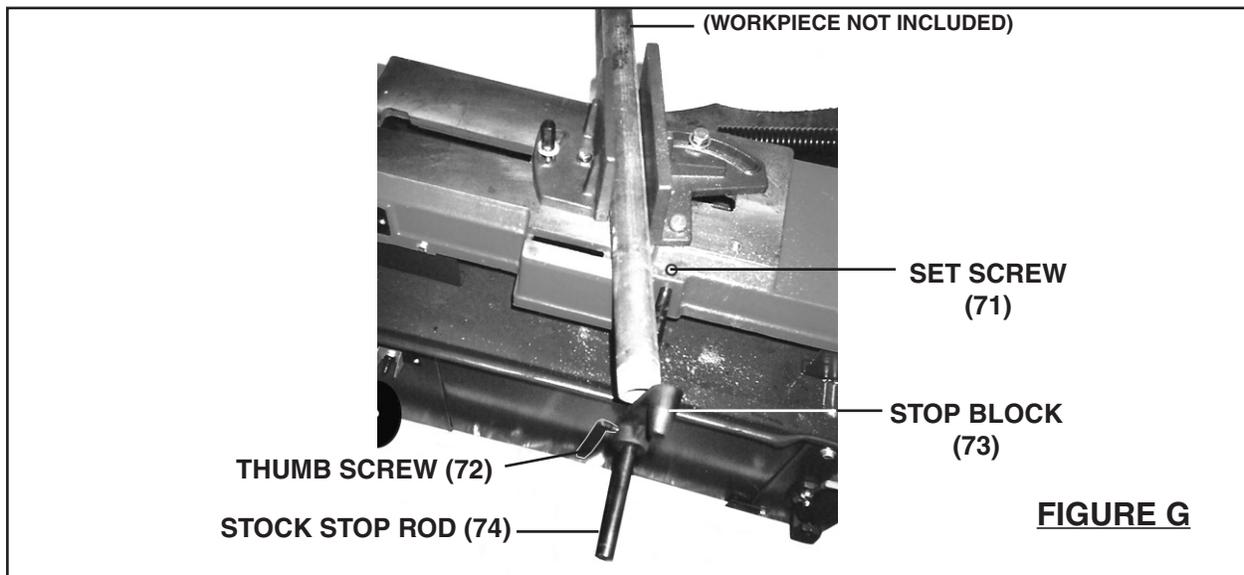
Slide the two openings in the Pulley Cover (189) under the two Pulleys (184, 185). Secure the Pulley Cover, using one Screw (187) and one Washer (188). Then close the lid of the Pulley Cover, and secure the lid with the Thumb Screw (190).  
**(See Figure F.)**



**FIGURE F**

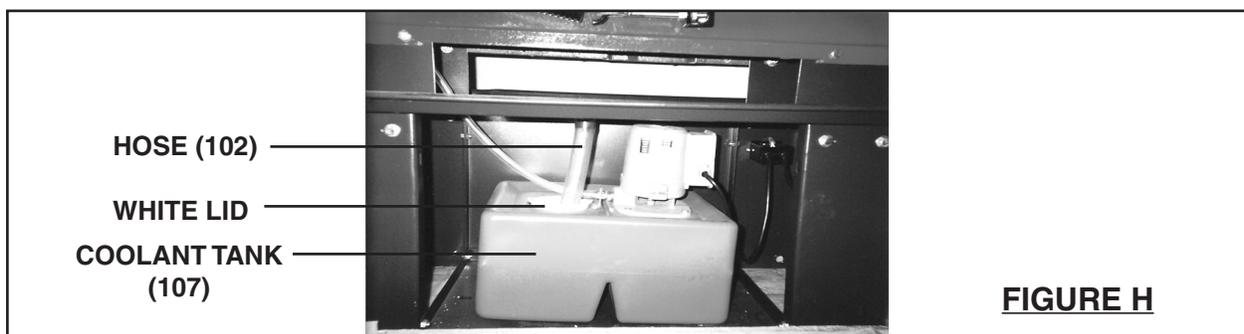
### **D - Attach The Tool Stop Rod And Block**

1. Slide the Stock Stop Rod (74) into the mounting hole in the Table (39), and secure the Stock Stop Rod by tightening the Set Screw (71). **(See Figure G.)**
2. Slide the Stop Block (73) onto the Stock Stop Rod (74), and secure by tightening the Thumb Screw (72). **(See Figure G.)**



### **E - Install The Coolant Tank**

1. Slide the Coolant Tank (107) out from under the Table (39) of the Bandsaw. **(See Figure H.)**
2. Remove the white lid at the top of the Coolant Tank (107), and fill the Coolant Tank to about 80% capacity with a water-soluble coolant (not included). Then, replace the white lid on the Coolant Tank. **(See Figure H.)**
3. Slide the Coolant Tank (107) back under the Table (39) of the Bandsaw. Then insert the Hose (102) through the hole in the white lid. **(See Figure H.)**

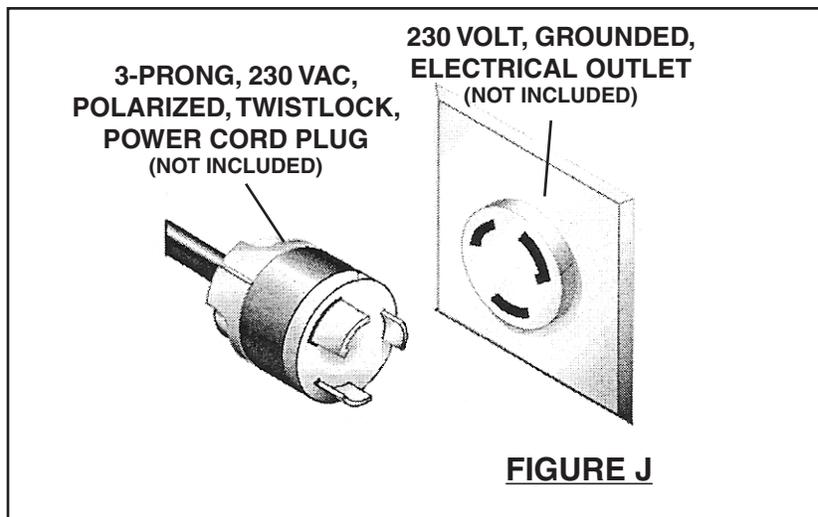
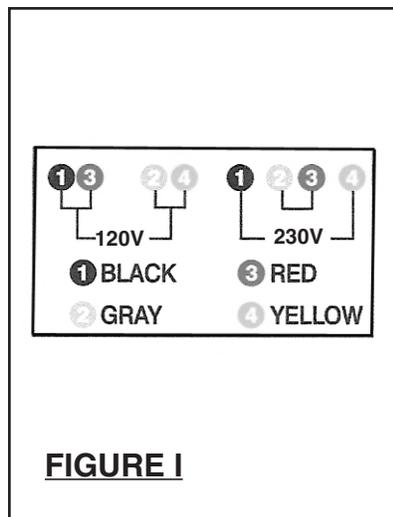


## Wiring Instructions

1. The Bandsaw comes equipped from the manufacturer with a **preassembled 120 volt Electric Cord Assembly (38) and is wired for 120 volt operation.** However, the Bandsaw is designed to operate on either **120 volt or 230 volt single phase circuits.**
2. Should you wish to operate the Bandsaw using a 120 volt system, disregard this section and go on to the next section in the manual.
3. Should you wish to change the electrical operating system from 120 volt to 230 volt, continue reading the instructions in this section.
4. **⚠️ WARNING! Only a certified electrician should attempt to change the electrical operating system from 120 volts to 230 volts.**
5. Note that the four wiring terminals in the Motor (192) are color coded for a 120 volt hookup and a 230 volt hookup. To power the Bandsaw with a 230 volt system, follow the illustration below. **(See Figure I.)**
6. Powering the Bandsaw with a 230 volt electrical system also requires the installation (by a certified electrician) of a 3-prong, 230 VAC, polarized, twistlock, Power Cord Plug (not included). **(See Figure J.)**

### **IMPORTANT**

- **Figure I below converts the motor alone to work on 230 VAC power.**
- **Additional procedures must be followed to prepare this unit for 230 VAC use including, but not limited to, replacement of the switches and coolant pump.**
- **Have a certified electrician get this unit ready for 230 VAC use before attempting to hook it up to power.**



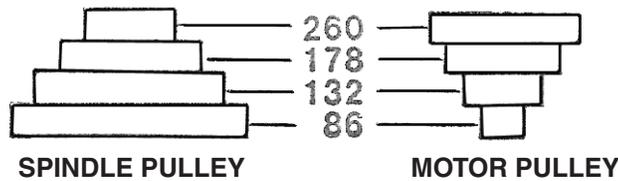
## OPERATING INSTRUCTIONS

**⚠ WARNING!** Always make sure the Toggle Switch (37) for the Bandsaw *and* the Toggle Switch (11) for the Coolant Pump are both in their “OFF” position and the tool is unplugged from its electrical outlet prior to making adjustments to the tool.

### Selecting Proper Blade Speeds:

When using the Bandsaw always change the blade speed to best suit the material being cut. The Blade Speed Chart illustrates several settings for several types of materials. **(See Figure K.)**

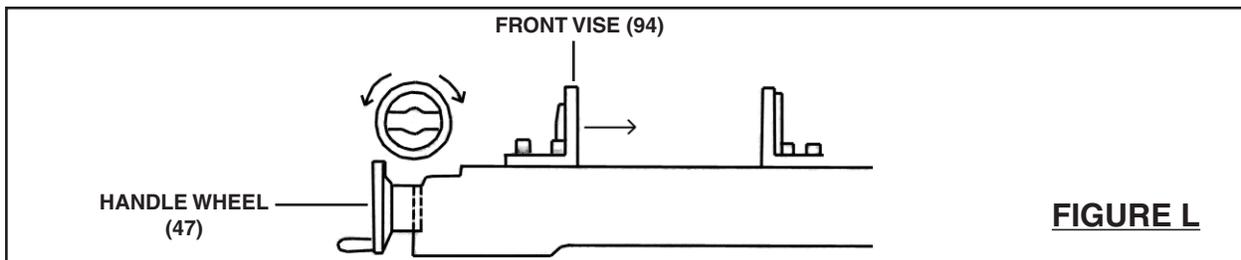
Material	Blade Speed (FPM)	Belt Groove Used	
		Motor Pulley	Saw Pulley
Tool, Stainless Alloy Steels, Bearing Bronze	86	Small	Largest
Medium to High Carbon Steels, Hard Brass or Bronze	132	Medium	Large
Low to Medium Carbon Steels, Soft Brass	178	Large	Medium
Aluminum, Plastic	260	Largest	Small



**FIGURE K**

### Using The Quick Vise:

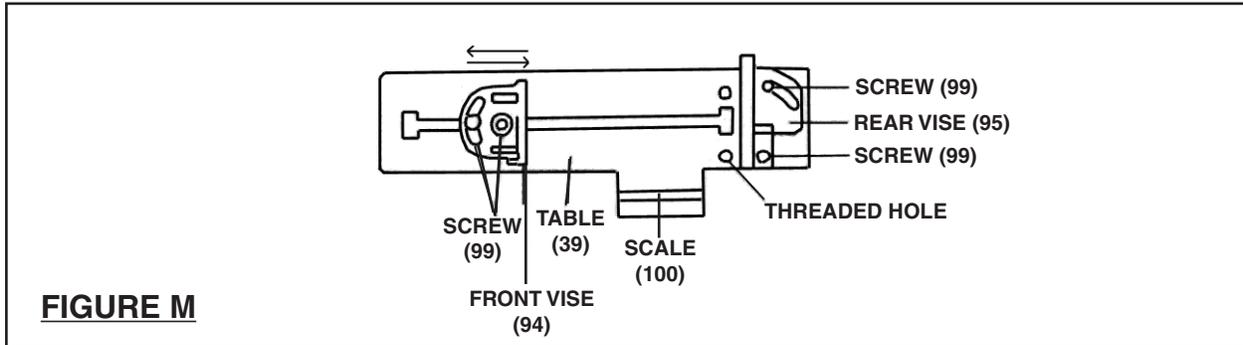
The Bandsaw is equipped with a “quick action” vise which allows you to instantly position the moveable Front Vise (94). To operate, turn the Handle Wheel (47) counterclockwise 1/2 turn and move the Front Vise to the desired position. Then tighten the Front Vise against the workpiece by turning the Handle Wheel clockwise. **(See Figure L.)**



**FIGURE L**

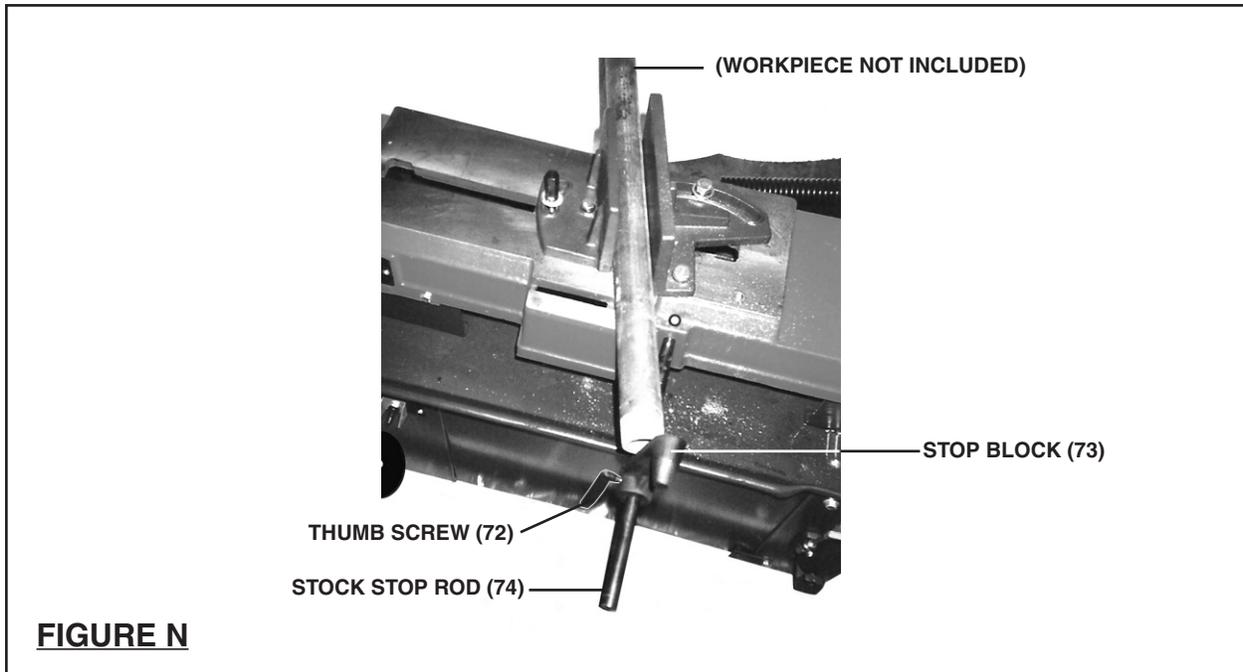
## Adjusting The Quick Vise For An Angle Cut:

Loosen the three Screws (99). Adjust the Rear Vise (95) to the threaded hole position. Set the Scale (100) to the desired angle. Adjust the Front Vise (94) to parallel the Rear Vise. Then, retighten the three Screws. **(See Figure M.)**



## Adjusting The Stop Block:

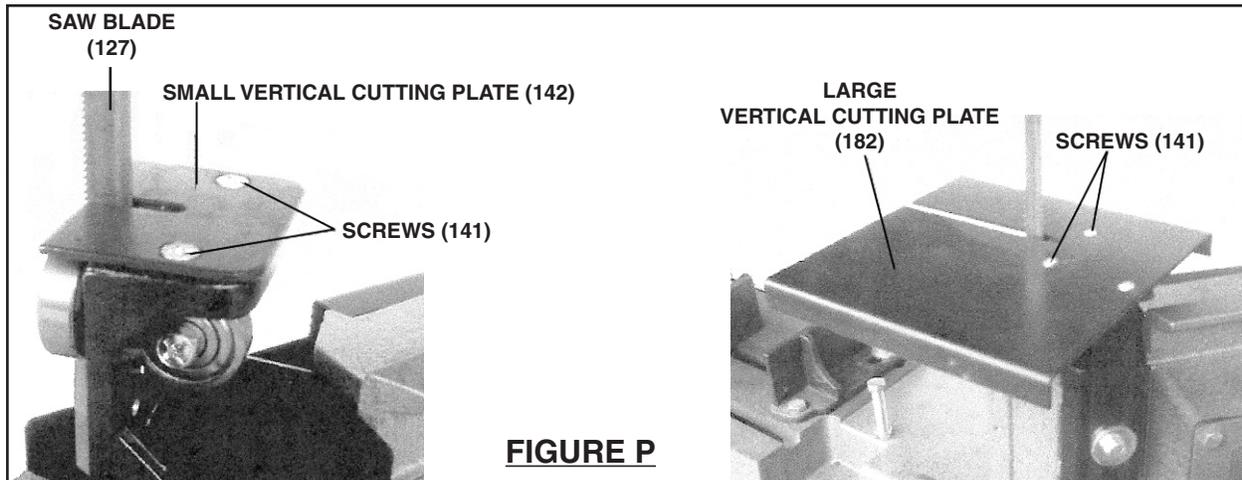
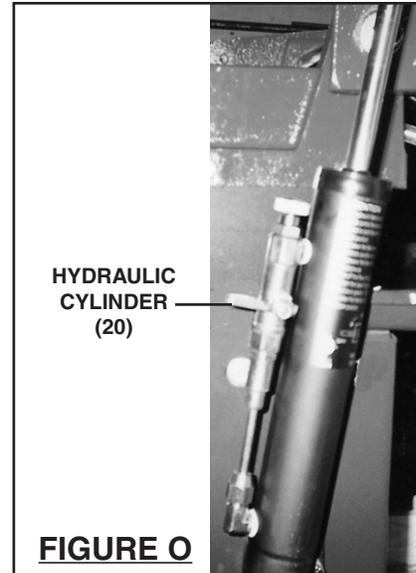
1. Loosen the Thumb Screw (72) that holds the Stop Block (73) to the Stock Stop Rod (74). **(See Figure N.)**
2. Adjust the Stop Block (73) to the desired length position. Then, retighten the Thumb Screw. **(See Figure N.)**





### Converting The Bandsaw For Vertical Use:

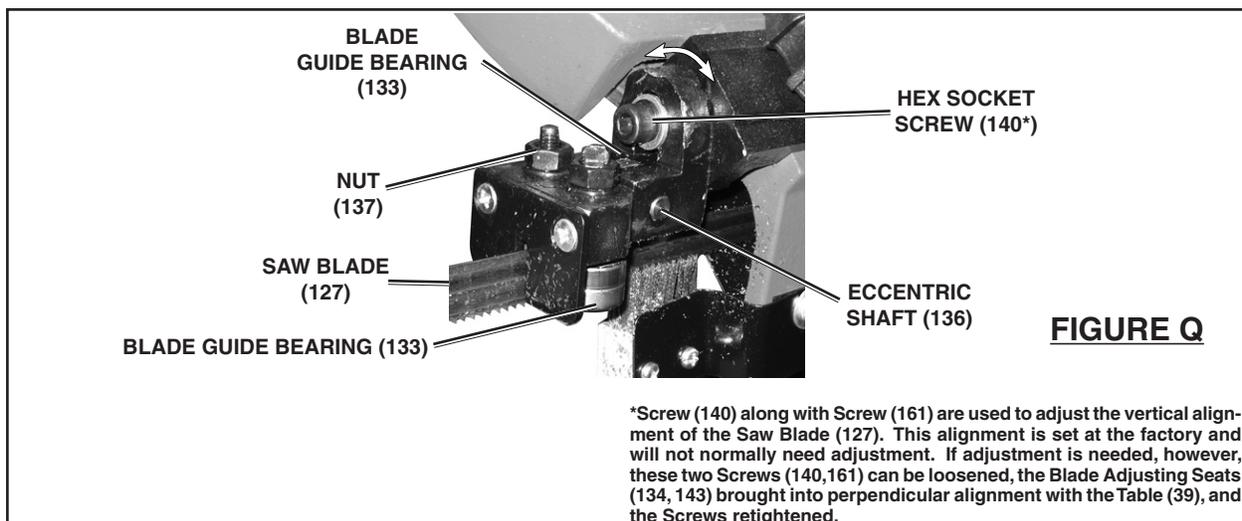
1. **NOTE:** Notching, slitting, and contour work is best done with the Bandsaw in its vertical position.
2. Raise the Saw Head to its full vertical position, making sure it locks in position by turning the Hydraulic Cylinder (20) to its “OFF” position. **(See Figure O.)**
3. Remove the two Screws (141), and remove the Small Vertical Cutting Plate (142). **(See Figure P.)**
4. Guide the Saw Blade (127) through the slot in the Large Vertical Cutting Plate (182), and secure it in position with the two Screws (141). **(See Figure P.)**



### Adjusting The Blade Guide Bearings:

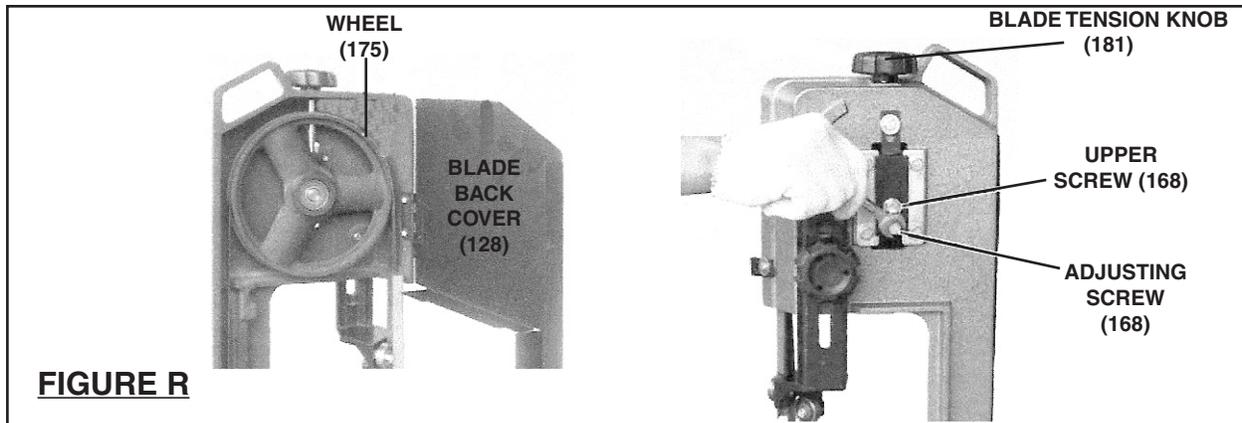
1. **NOTE:** Blade Guide Bearings (133) adjustment is a critical factor in the performance of the Bandsaw.
2. It is always best to try a new Saw Blade (127) to see if it will correct poor cutting before attempting to adjust the Blade Guide Bearings. For example, if a Saw Blade becomes dull on one side sooner than the other, it will begin cutting crooked. A Saw Blade replacement will correct this problem, whereas Blade Guide Bearings adjustment will not.
3. If a new Saw Blade does not correct the problem, check the Blade Adjustable Seats (134, 143) to obtain the proper clearance. **(See Figure Q, next page.)**

4. **NOTE:** There should be from .000" (just touching) to .001" clearance between the Saw Blade and Blade Guide Bearings (133). To obtain this clearance adjust as follows:
  - A. The Outer Blade Guide Bearings (133) are mounted to Eccentric Shafts (136) and can be adjusted. **(See Figure Q.)**
  - B. Loosen the Nut (137) while holding the Eccentric Shaft (136) with an Allen wrench (not included). **(See Figure Q.)**
  - C. Position the Eccentric Shaft (136) by turning it to the desired position of clearance. Then, retighten the Nut (137). **(See Figure Q.)**
  - D. Adjust the second Blade Guide Bearing (133) in the same manner.



### Adjusting The Blade Tracking:

1. Raise the Saw Head to its full vertical position, making sure it locks in position by turning the Hydraulic Cylinder (20) to its "OFF" position. **(See Figure O.)**
2. Turn on the Bandsaw. The Saw Blade (127) is tracking properly when the back of the Blade is just touching the edge of the Wheel (175) flange. **(See Figure R, next page.)**
3. If adjustment is necessary, the Blade Guide Bearings (133) should be clear of the Saw Blade (127). **(See Figure Q.)**
4. Loosen the upper Screw (168) to a point where it is loose but snug. **(See Figure R.)**
5. With the Bandsaw running, turn the Adjusting Screw (168) until the Saw Blade (127) is tracking properly, making sure Blade tension is maintained by turning the Blade Tension Knob (181). **(See Figure R, next page.)**
6. Make sure to retighten the upper Screw (168) when adjustment is complete. **(See Figure R.)**



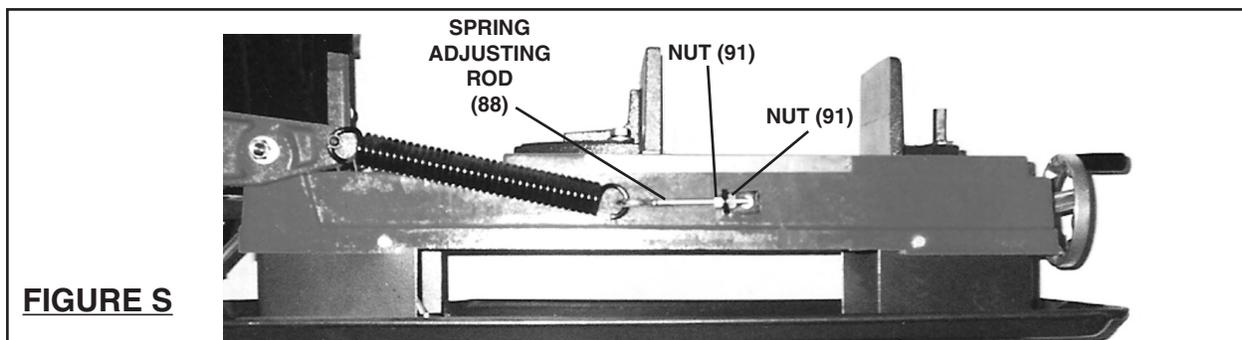
**FIGURE R**

### Adjusting The Blade Tension:

1. Turn the Blade Tension Knob (181) clockwise to increase tension on the Saw Blade (127). Turn the Blade Tension Knob counterclockwise to decrease tension on the Saw Blade. Correct tension is acquired when the Saw Blade is just tight enough so that no slippage occurs between the Saw Blade and the Wheels (124, 175).
2. **NOTE:** When the Bandsaw is not in use over long periods of time, release the tension on the Saw Blade (127).

### Adjusting The Feed Rate:

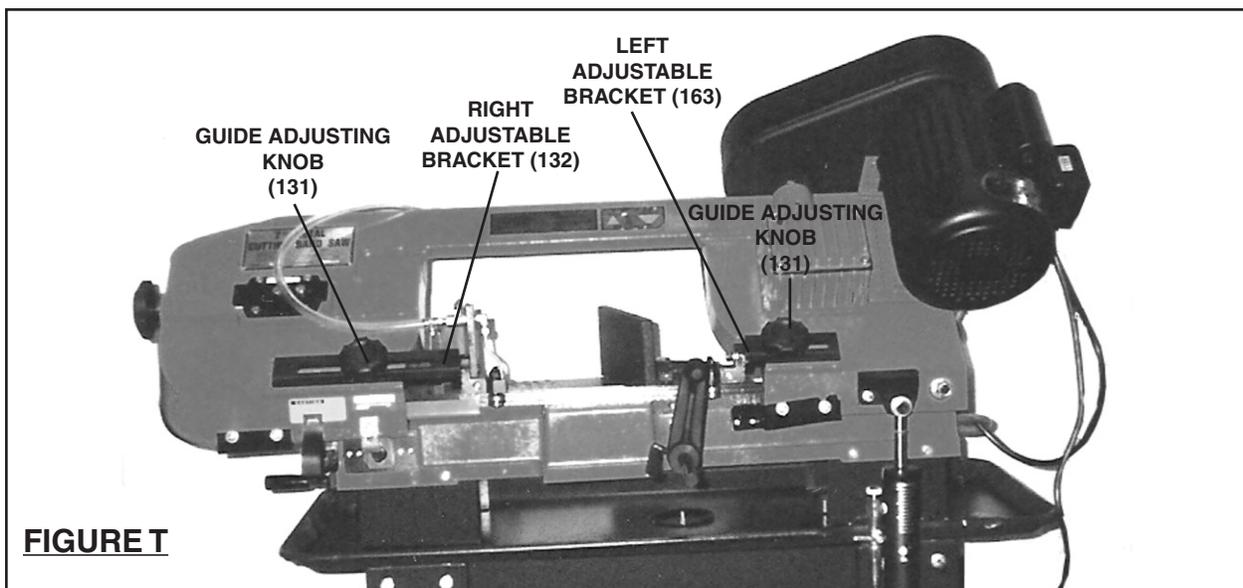
1. Excessive feed pressure can break the Saw Blade (127). Insufficient feed pressure dulls the Saw Blade rapidly.
2. The Cylinder (20) controls the blade speed during horizontal cutting. The hydraulic feed control is turned on or off via the small lever on the small cylinder. The speed is controlled during or right before horizontal cutting.  
**IMPORTANT: When the cylinder is in the OFF position, the Saw Arm will lock into the vertical position. Never force the Saw Arm down. If the Saw Arm descends while the Cylinder is in the OFF position, disconnect the unit from power and do not use the tool until the hydraulic feed has been repaired.**
3. The Spring (87) may also need to be adjusted to ensure a proper feed rate. Loosen the Nut (91) on the right one turn. Loosen the nut on the left one turn to decrease the feed rate or tighten the Nut on the left one turn to increase feed rate. After adjusting, tighten the Nut on the right securely while holding the left nut still. (See Figure S.)



**FIGURE S**

### Adjusting The Blade Guide Brackets:

1. The Right Adjustable Bracket (132) and Left Adjustable Bracket (163) are adjustable by loosening the two Guide Adjusting Knobs (131) and sliding the Brackets to accommodate the width of the workpiece. **(See Figure T.)**
2. The Blade Guide Brackets (132, 163) should be set as close as possible to the workpiece, without interfering with the workpiece or contacting the Table (39). **(See Figure T.)**
3. Once the adjustment is made, make sure to retighten the Guide Adjusting Knobs (131). **(See Figure T.)**

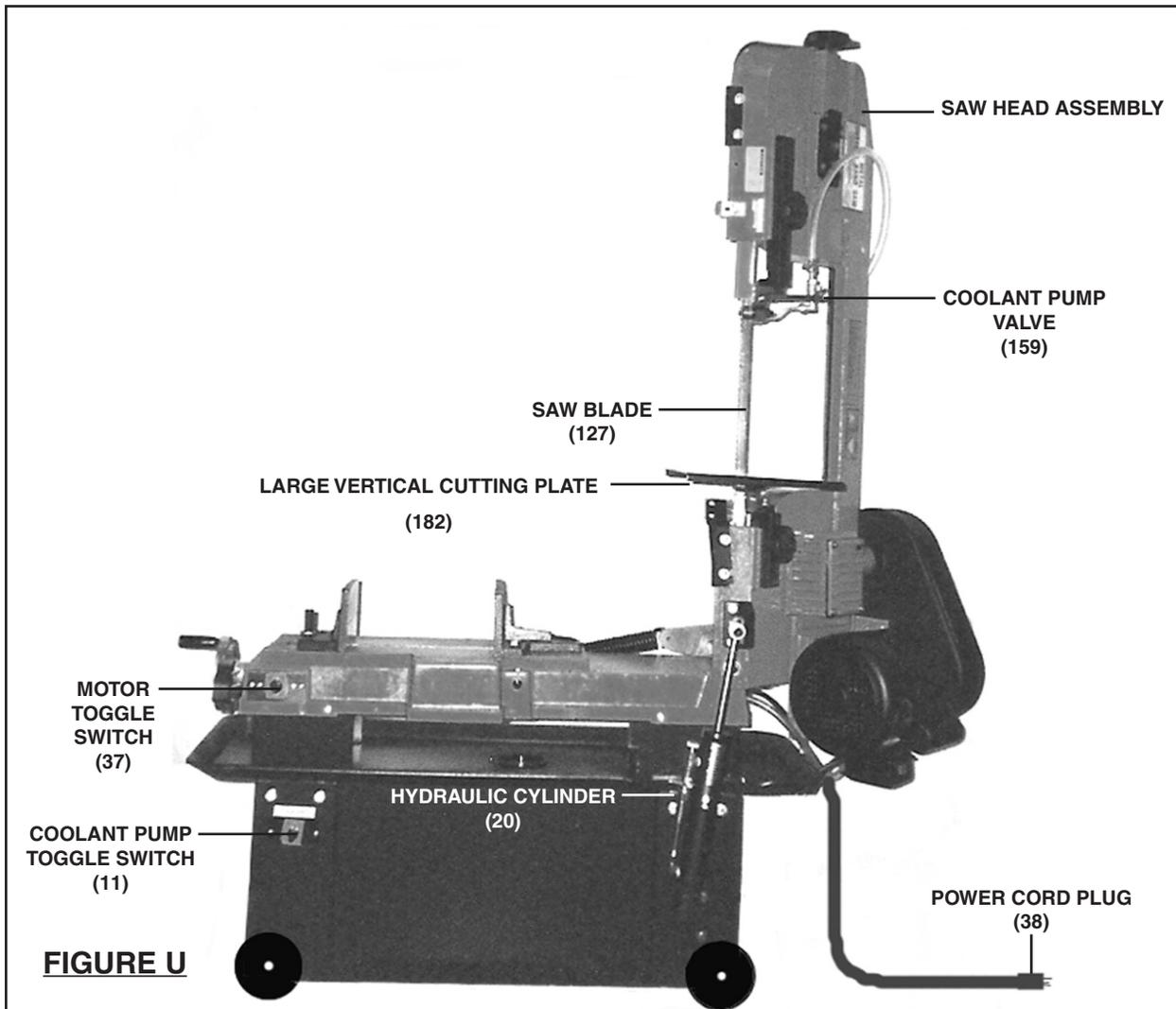


### Basic Bandsaw Operation -- Vertical Position:

1. **⚠ WARNING!** Always wear ANSI approved safety impact eye goggles when operating the Bandsaw.
2. **Do not plug the Power Cord Plug (38) into an electrical outlet until all necessary adjustments (as previously discussed in this manual) have been made.**
3. Raise the Saw Head to its full vertical position, making sure it locks in place by turning the Hydraulic Cylinder (20) to its **“OFF”** position. **(See Figure U, next page.)**
4. Once all necessary adjustments to the Bandsaw have been made, plug the Power Cord Plug (38) into the nearest **120 volt, grounded, electrical outlet** (if the Bandsaw is powered by a 120 volt system). If powered by a 230 volt system, plug the Power Cord Plug into the nearest **230 volt, grounded, electrical outlet**.

(See Figure U.)

5. Turn the Coolant Pump Valve (159) to its “**OPEN**” position. Then, turn the Coolant Pump Toggle Switch (11) to its “**ON**” position. (See Figure U.)
6. Turn the Motor Toggle Switch (37) to its “**ON**” position. (See Figure U.)
7. **⚠️WARNING!** Cut only *flat* workpieces when the Bandsaw is in its vertical position. Never attempt to cut pipes or other round objects with the Bandsaw in its vertical position.
8. Before cutting, turn on the Bandsaw and check for excessively loose Saw Blade (127) tension or machine vibration. If this is found, turn off the Bandsaw and correct the problem before using. (See Figure U.)
9. Set the workpiece on the Large Vertical Cutting Plate (182), making sure to keep downward pressure on the workpiece throughout the cutting process. (See Figure U.)

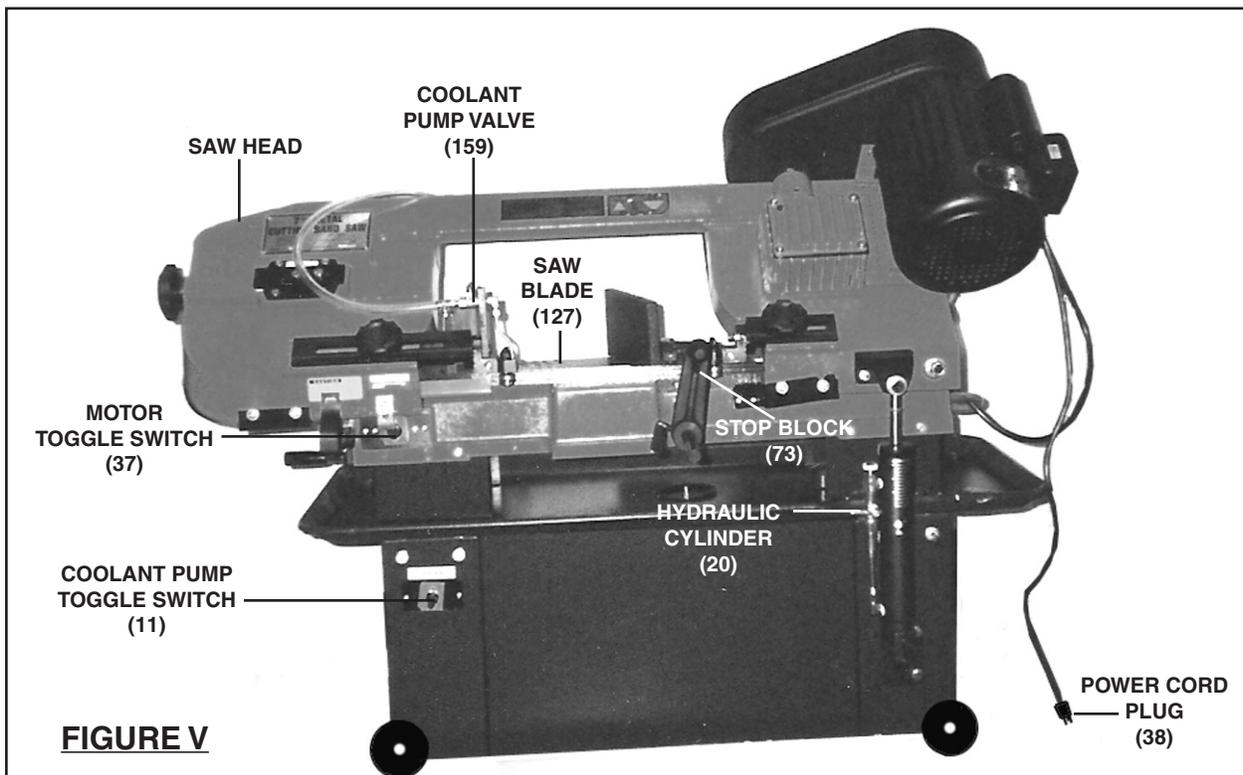


10. When cutting a large workpiece, make sure its entire length is properly supported. If necessary, use a roller stand (not included) with a larger workpiece.
11. Allow the Saw Blade (127) to turn up to full speed before feeding the workpiece into the Saw Blade. **(See Figure U.)**
12.  **WARNING!** Always keep hands and fingers safely away from the cutting area.
13. Feed the workpiece into the Saw Blade (127) gradually. Do not force the Bandsaw to remove material faster than it is designed to cut. **(See Figure U.)**
14. Never attempt to remove material stuck in the moving parts of the Bandsaw while it is plugged in and running. Turn off the Bandsaw if the workpiece is to be backed out of an uncompleted cut.
15. Once the cut is made, turn the Motor Toggle Switch (37) to its “OFF” position. Turn the Coolant Pump Toggle Switch (11) to its “OFF” position. Turn the Coolant Pump Valve (159) to its “CLOSED” position. Then, unplug the Power Cord Plug (38) from its electrical outlet. **(See Figure U.)**
16. Wait until the Saw Blade (127) comes to a complete stop. Then, remove the workpiece and scrap material from the Large Vertical Cutting Plate (182). **(See Figure U.)**
17. Turn the Hydraulic Cylinder (20) to its “ON” position. Adjust the feed rate if needed (by turning the knob on the Cylinder counterclockwise), and slowly allow the Saw Head to lower to its horizontal position. **(See Figure U.)**

### **Basic Bandsaw Operation -- Horizontal Position:**

1.  **WARNING!** Always wear ANSI approved safety impact eye goggles when operating the Bandsaw.
2. **Do not plug the Power Cord Plug (38) into an electrical outlet until all necessary adjustments (as previously discussed in this manual) have been made. Be sure that the Bandsaw is set up with its Small Vertical Cutting Plate (142) before proceeding - see page 17.**
3. Turn the Hydraulic Cylinder (20) to its “ON” position, and raise the Saw Head to its full vertical position. Then, turn the Hydraulic Cylinder (20) to its “OFF” position to lock the Saw Head in place. **(See Figure U.)**
4. Secure the workpiece in the Vise assembly (94, 95). When cutting a large workpiece, make sure its entire length is properly supported. If necessary, use a roller stand (not included) with a larger workpiece. **(See Figure V.)**
5. If cutting several workpieces at the same length, you may wish to adjust the Stop Block (73) to the desired position. **(See Figure V.)**

6. Once all necessary adjustments to the Bandsaw have been made, plug the Power Cord Plug (38) into the nearest **120 volt, grounded, electrical outlet** (if the Bandsaw is powered by a 120 volt system). If powered by a 230 volt system, plug the Power Cord Plug into the nearest **230 volt, grounded, electrical outlet**. **(See Figure V.)**
7. Turn the Hydraulic Cylinder (20) to its **“ON”** position, and slowly allow the Saw Head to lower until the Saw Blade (127) is just above the workpiece cut line. Turn the hydraulic Cylinder back into its **“OFF”** position once it is in place. **(See Figure V.)**
8. Turn the Coolant Pump Valve (159) to its **“OPEN”** position. Then, turn the Coolant Pump Toggle Switch (11) to its **“ON”** position. **(See Figure V.)**
9. Turn the Motor Toggle Switch (37) to its **“ON”** position. **(See Figure V.)**
10. Before cutting, turn on the Bandsaw and check for excessively loose Saw Blade (127) tension or machine vibration. If this is found, turn off the Bandsaw and correct the problem before using. **(See Figure V.)**
11. Allow the Saw Blade (127) to turn up to full speed before feeding the Saw Blade (127) into the workpiece. **(See Figure V.)**
12. **⚠️WARNING! Always keep hands and fingers safely away from the cutting area.**
13. Turn the Hydraulic Cylinder (20) to its **“ON”** position, and allow the Saw Arm to



**FIGURE V**

automatically lower on its own, while it gradually feeds the Saw Blade (127) into the workpiece. Do not force the Bandsaw to remove material faster than it is designed to cut. **NOTE:** The speed at which the Saw Arm moves downward may be increased or decreased by adjusting the valve on the Hydraulic Cylinder (20). **(See Figure V.)**

14. Never attempt to remove material stuck in the moving parts of the Bandsaw while it is plugged in and running. Turn off the Bandsaw if the workpiece is to be backed out of an uncompleted cut.
15. **IMPORTANT:** When in the horizontal cutting mode only, the Motor Toggle Switch (37) will automatically turn to its “**OFF**” position and shut off the Bandsaw’s Motor when the cut has been completed.
16. Once the cut is made, check to make sure the Motor Toggle Switch (37) is in its “**OFF**” position. Turn the Coolant Pump Toggle Switch (11) to its “**OFF**” position. Turn the Coolant Pump Valve (159) to its “**CLOSED**” position. Then, unplug the Power Cord Plug (38) from its electrical outlet. **(See Figure V.)**
17. Wait until the Saw Blade (127) comes to a complete stop. Then, raise the Saw Head to its full vertical position. Turn the Hydraulic Cylinder (20) to its “**OFF**” position to lock the Saw Head in place. Remove the workpiece from the Vise assembly (94, 95) and scrap material from the Table (39) of the Bandsaw. **(See Figure V.)**
18. Turn the Hydraulic Cylinder (20) to its “**ON**” position. Adjust the feed rate if needed (by turning the knob on the Cylinder counterclockwise), and slowly allow the Saw Head to lower to its horizontal position. **(See Figure V.)**

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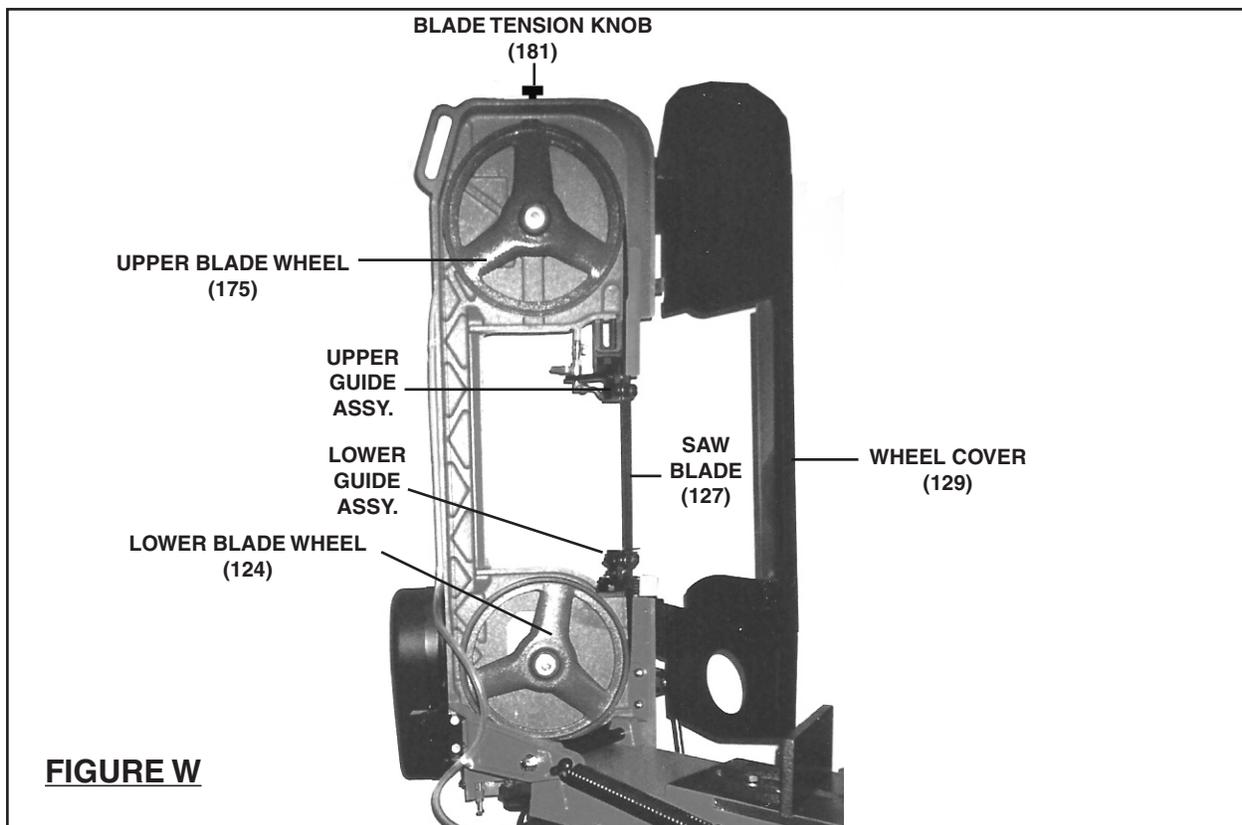
## INSPECTION, MAINTENANCE, AND CLEANING

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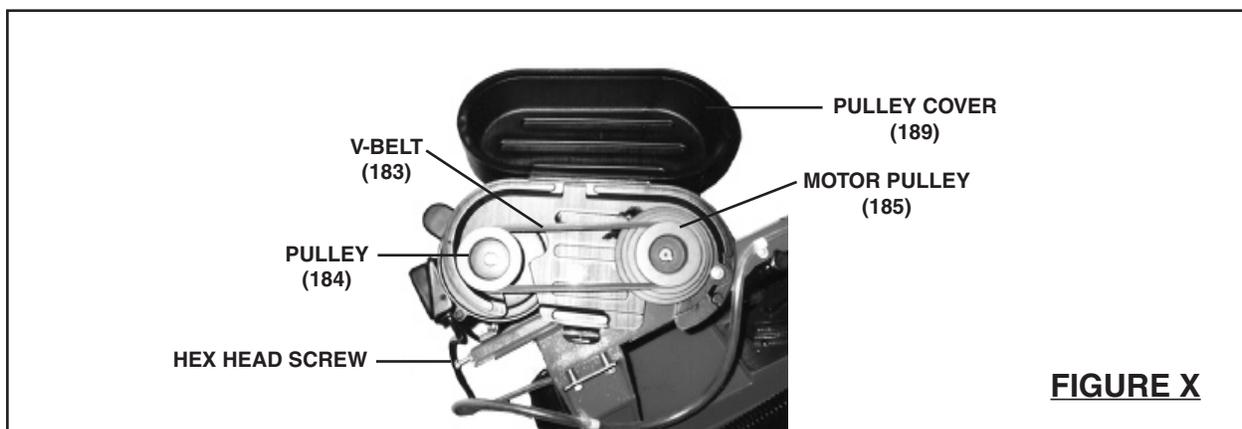
1.  **WARNING!** Make sure the Motor Toggle Switch (37) and Coolant Toggle Switch (11) of the Bandsaw is in their “**OFF**” positions and the tool is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
2. **Before each use**, inspect the general condition of the Bandsaw. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**



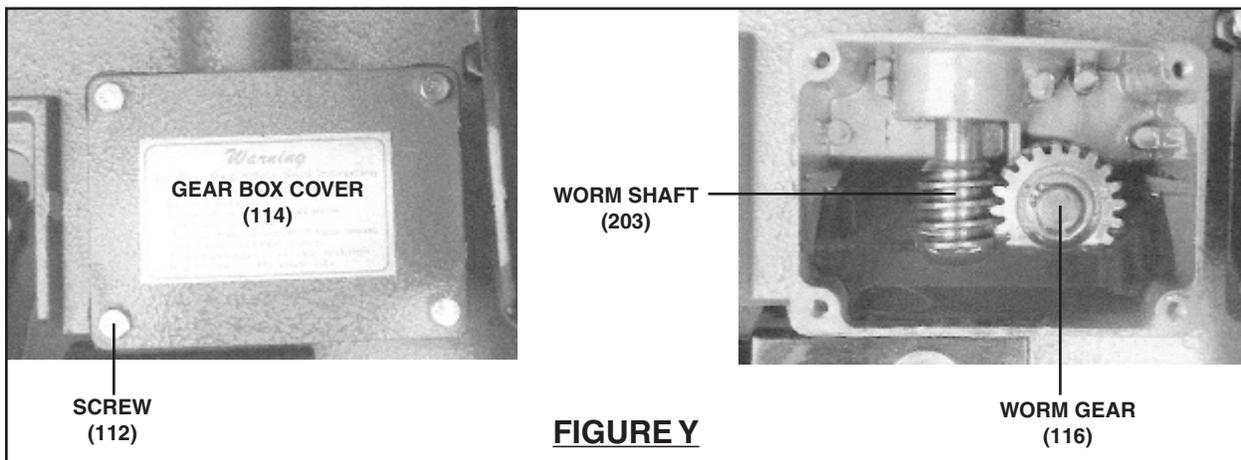
3. **Before each use**, inspect the Saw Blade (127). Using a dull Saw Blade will cause excessive wear on the Motor of the Bandsaw and will not produce a satisfactory cut. Replace with a new Saw Blade when needed. To replace a Saw Blade:
- NOTE:** Make sure to wear heavy duty work gloves to avoid accidental cuts from the Saw Blade (127) when performing this procedure.
  - Turn the Hydraulic Cylinder (20) to its “**ON**” position, and raise the Saw Head to its full vertical position. Then, turn the Hydraulic Cylinder (20) to its “**OFF**” position to lock the Saw Head in place. **(See Figure V.)**
  - Open the Wheel Cover (129). **(See Figure W.)**
  - Release Saw Blade (127) tension by turning the Blade Tension Knob (181). **(See Figure W.)**
  - Slip the old Saw Blade (127) off the Upper Blade Wheel (175), Lower Blade Wheel (124), and Guide assemblies. **(See Figure W.)**
  - Place the new Saw Blade (127) between each of the Guide assemblies and around the Upper Blade Wheel (175) and Lower Blade Wheel (124).  
**IMPORTANT: The teeth must be pointing downward toward the Motor.** (See Figure W.)



- g. **NOTE:** The Bandsaw is equipped with a 93" diameter, .032" thick, 3/4" wide, 8 tooth per inch Saw Blade (127). The machine will also accept Blades in 4, 6, 8, and 10 tooth sizes. The choice of Blade pitch is determined by the thickness of the material to be cut. The thinner the workpiece, the more teeth is recommended. A minimum of 3 teeth should engage the workpiece at all times for proper cutting. If the teeth of the Saw Blade are so far apart that they straddle the workpiece, severe damage to the workpiece and/or Saw Blade will result. **(See Figure W.)**
  - h. Tighten the tension on the new Saw Blade (127) by turning the Blade Tension Knob (181). **(See Figure W.)**
  - i. Close the Wheel Cover (129). **(See Figure W.)**
4. **To replace the V-Belt:** The Bandsaw uses a size 3V270 V-Belt (183). To replace the V-Belt:
- a. Open the Pulley Cover (189). **(See Figure X.)**
  - b. Loosen the Hex Head Screw to release tension on the old V-Belt. **(See Figure X.)**
  - c. Remove the old V-Belt (183) from the two Pulleys (184, 185). **(See Figure X.)**
  - d. Place the new V-Belt (183) into the proper Pulley (184, 185) combination for the desired Blade speed. **(See Figure K.)**
  - e. Adjust the position of the Motor (192) to obtain approximately 1/2" depression in the V-Belt (183) when applying pressure with your thumb. **(See Figure X.)**
  - f. Tighten the Hex Head Screw to secure the Motor (192) in place. **(See Figure X.)**

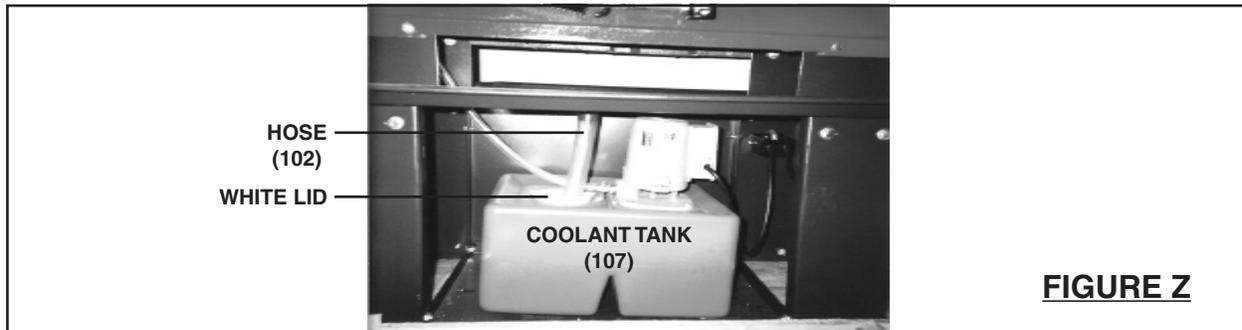


5. **To lubricate the Worm Gear and Worm Shaft:** The Worm Gear (116) and Worm Shaft (203) run in an oil bath Gear Box (121) and should not require an oil change more than once a year, unless the oil becomes contaminated or a leak occurs due to improper replacement of the Gear Box Cover (114). To change oil in the Gear Box:
  - a. Position the Saw Arm in the horizontal position. **(See Figure V.)**
  - b. Remove the four Screws (112), Gear Box Cover (114), and Gear Box Gasket (115). **(See Figure Y.)**
  - c. Remove the old oil from inside the Gear Box (121) and replace the oil using 140 weight gear oil. The new oil should just come to the edge of the Gear Box. Do not overfill. **(See Figure Y.)**
  - d. Replace the Gear Box Gasket (115), Gear Box Cover (114), and four Screws (112). **(See Figure Y.)**



6. **Periodically, remove the coolant Strainer (44) and brush any chips that may have accumulated away from the drain.**  
**To replace the Coolant:** The water-soluble Coolant should be replaced as often as is necessary to keep metal debris in the Coolant from clogging the hoses. To replace the Coolant:
  - a. Slide the Coolant Tank (107) out from under the Table (39) of the Bandsaw. **(See Figure Z, next page.)**

- b. Remove the white lid at the top of the Coolant Tank (107), and dispose of the old Coolant properly in a container. **(See Figure Z.)**
- c. Fill the Coolant Tank (107) to about 80% capacity with a clean water-soluble coolant (not included). Then, replace the white lid on the Coolant Tank. **(See Figure Z.)**
- d. Slide the Coolant Tank (107) back under the Table (39) of the Bandsaw. Then insert the Hose (102) through the hole in the white lid. **(See Figure Z.)**



7. **To clean the exterior parts of the Bandsaw**, use only a clean cloth and mild detergent or mild solvent to clean the body of the Saw. **Do not immerse any electrical part of the machine in any liquids.**
8. **⚠ WARNING!** All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.

**PLEASE READ THE FOLLOWING CAREFULLY**

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

# TROUBLESHOOTING

Problem	Possible Cause(s)	Possible Solution
Excessive blade breakage.	<ol style="list-style-type: none"> <li>1. Incorrect Blade tension.</li> <li>2. Incorrect speed or feed.</li> <li>3. Material loose in vise.</li> <li>4. Blade rubs on Wheel Flange.</li> <li>5. Teeth too coarse for material.</li> <li>6. Teeth in contact with material before Saw started.</li> <li>7. Misaligned Guides.</li> <li>8. Blade too thick for Wheel diameter.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten Blade tension. (See page 18.)</li> <li>2. Check manual for correct Blade speed. (See page 16.)</li> <li>3. Clamp work securely. (See page 16.)</li> <li>4. Adjust blade tracking. (See page 17.)</li> <li>5. Check manual for recommended Blade type. (See page 25.)</li> <li>6. Allow Blade to spin up to full speed before feeding material into it.</li> <li>7. Adjust Guides. (See page 17.)</li> <li>8. Use thinner Blade. (See page 25.)</li> </ol>
Premature blade dulling.	<ol style="list-style-type: none"> <li>1. Teeth too coarse.</li> <li>2. Too much blade speed.</li> <li>3. Inadequate feed pressure.</li> <li>4. Hard spots or scale in/on material.</li> <li>5. Work hardening of material.</li> <li>6. Blade installed backwards.</li> <li>7. Insufficient Blade tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use finer tooth Blade. (See page 25.)</li> <li>2. Try next lower speed. (See page 14.)</li> <li>3. Decrease spring tension on side of Saw. (See page 18.)</li> <li>4. Reduce speed, increase feed pressure. (See pages 14 and 18.)</li> <li>5. Increase feed pressure by reducing spring tension. (See page 18.)</li> <li>6. Remove Blade. Then properly install Blade. (See pages 24 and 25.)</li> <li>7. Increase tension to proper level. (See page 18.)</li> </ol>
Blade cuts crooked.	<ol style="list-style-type: none"> <li>1. Workpiece not square.</li> <li>2. Feed pressure too great.</li> <li>3. Guide Bearing not adjusted properly.</li> <li>4. Inadequate Blade tension.</li> <li>5. Blade Guides spaced out too much.</li> <li>6. Dull Blade.</li> <li>7. Speed incorrect.</li> <li>8. Blade Guide assembly loose.</li> <li>9. Blade Guide Bearing assembly loose.</li> <li>10. Blade tracks too far away from Wheel Flanges.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust Vise so it is square with Blade. Always clamp work tightly in Vise. (See pages 15 and 16.)</li> <li>2. Reduce pressure by increasing spring tension on side of Saw. (See page 18.)</li> <li>3. Adjust Guide Bearing to .001" greater than maximum thickness, including the weld of the Saw Blade. (See page 17.)</li> <li>4. Increase Blade tension a little at a time. (See page 18.)</li> <li>5. Move Guide as close to work as possible. (See page 19.)</li> <li>6. Replace Blade. (See pages 24 and 25.)</li> <li>7. Check manual for recommended speeds. (See page 14.)</li> <li>8. Tighten Blade Guide assembly. (See page 19.)</li> <li>9. Tighten Blade Guide Bearing assembly. (See page 17.)</li> <li>10. Re-track Blade according to operating instructions. (See page 17.)</li> </ol>
Blade cuts rough.	<ol style="list-style-type: none"> <li>1. Too much speed or feed.</li> <li>2. Blade is too coarse.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce speed and feed. (See pages 14 and 18.)</li> <li>2. Replace with finer Blade. (See pages 24 and 25.)</li> </ol>
Blade is twisting.	<ol style="list-style-type: none"> <li>1. Cut is binding Blade.</li> <li>2. Too much Blade tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Decrease feed pressure. (See page 18.)</li> <li>2. Decrease Blade tension. (See page 18.)</li> </ol>
Unusual wear on side/back of blade.	<ol style="list-style-type: none"> <li>1. Blade Guides worn.</li> <li>2. Blade Guide Bearings not adjusted properly.</li> <li>3. Blade Guide Bearing Bracket is loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace Blade Guides. (See page 17.)</li> <li>2. Adjust according to operator's manual. (See page 17.)</li> <li>3. Tighten Blade Guide Bearing Bracket. (See page 17.)</li> </ol>
Teeth ripping from blade.	<ol style="list-style-type: none"> <li>1. Teeth too coarse for work.</li> <li>2. Too heavy feed or too slow feed.</li> <li>3. Vibrating workpiece.</li> <li>4. Teeth filled with debris.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use finer tooth Blade. (See page 25.)</li> <li>2. Increase feed pressure and/or speed. (See pages 14 and 18.)</li> <li>3. Clamp work securely. (See pages 15 and 16.)</li> <li>4. Use coarse tooth Blade or brush to remove debris. (See page 25.)</li> </ol>
Unit does not turn off automatically when horizontal cutting is completed.	<ol style="list-style-type: none"> <li>1. Improperly adjusted Stop Screw (60). Saw Arm is not pushing power switch off.</li> <li>2. Broken power switch.</li> </ol>	<ol style="list-style-type: none"> <li>1. Lower the Saw Arm completely. Tighten the Stop Screw until the Saw Arm prevents the power switch from turning on.</li> <li>2. Have a qualified technician repair/replace power switch.</li> </ol>
Motor running too hot.	<ol style="list-style-type: none"> <li>1. Blade tension too high.</li> <li>2. Drive Belt tension too high.</li> <li>3. Blade is too coarse for work.</li> <li>4. Blade is too fine for work.</li> <li>5. Gear not aligned properly.</li> <li>6. Gears need lubrication.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce tension on Blade. (See page 18.)</li> <li>2. Reduce tension on Drive Belt. (See page 25.)</li> <li>3. Use finer Blade. (See page 25.)</li> <li>4. Use coarser Blade. (See page 25.)</li> <li>5. Adjust Gears so that Worm is in center of Gear. (See page 26.)</li> <li>6. Check Oil Bath. (See page 26.)</li> </ol>

## PARTS LIST

Part	Description	Qty.
1	Bottom Pan	1
2	Leg (Left)	1
3	Leg (Right)	1
4	Skirt	1
5	Shelf	1
10	Switch Bracket	1
11	Coolant Pump Toggle Switch	1
12	Electrical Box	1
13	Hex Head Screw	8
14	Washer	8
15	Washer	8
16	Spring Washer	8
17	Nut	8
18	Hex Head Screw	6
19	Nut	6
20	Cylinder	1
21	Hex Socket Screw	1
22	Washer	1
23	Spring Washer	1
24	Nut	1
25	Hex Head Screw	2
26	Spring Washer	2
27	Support Rod	1
28	Set Screw	1
29	Bottom Support	1
33	Washer	4
34	Wheel	4
35	Wheel Shaft	2
36	Cotter Pin	4
37	Motor Toggle Switch	1
38	Power Cord/Plug	1
39	Table	1
40	Hex Head Screw	5
41	Washer	5
42	Spring Washer	5
43	Nut	5
44	Strainer	1
45	Round Head Screw	2
46	Electrical Box Assy.	1
47	Handle Wheel	1
48	Set Screw	1
49	Key	1
50	Lead Screw	1
51	Nut Seat	1
52	Acme Nut	1
53	Button	1
54	Retainer	1
55	Spring Washer	1
56	Round Head Screw	1
57	Hex Head Screw	2
58	Spring Washer	2
58-1	Washer	2
59	Support Plate	1
60	Stop Screw	1

Part	Description	Qty.
61	Nut	2
62	Hex Head Screw	1
63	Nut	1
64	90 Degree Support	1
65	Nut	2
66	Spring Washer	2
70	Hex Head Screw	2
71	Hex Head Screw	1
72	Thumb Screw	1
73	Stop Block	1
74	Stock Stop Rod	1
75N	Nut	2
76	Washer	2
77	Bearing Bushing	2
80N	Support Shaft	1
80-1	Bushing	1
81	Pivot Arm	1
84	Plate	1
85	Spring Washer	2
86	Hex Head Screw	2
87	Spring	1
88	Spring Adjusting Rod	1
89	Spring Bracket	1
90	Hex Head Screw	1
91	Nut	2
92	Spring Washer	1
92-1	Washer	1
93	Nut	1
94	Front Vise	1
95	Rear Vise	1
96	Vise Thrust Shaft	1
96-1	Spring Washer	2
96-2	Washer	1
97	Hex Head Screw	1
98	Hex Head Screw	1
98-1	Spring Washer	2
98-2	Washer	1
99	Hex Head Screw	1
100	Scale	1
101	Hex Socket Screw	1
101-1	Nut	1
102	Hose	1
103	Pump	1
104	Hex Head Screw	4
107	Coolant Tank	1
108	Hose Fitting	1
109	Hose Clamp	1
110	Hose	1
111	Saw Bow	1
112N	Tap Screw	4
113	Vent Plug	1
114N	Gear Box Cover	1
115N	Gear Box Gasket	1
116	Worm Gear	1

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## PARTS LIST (CONT.)

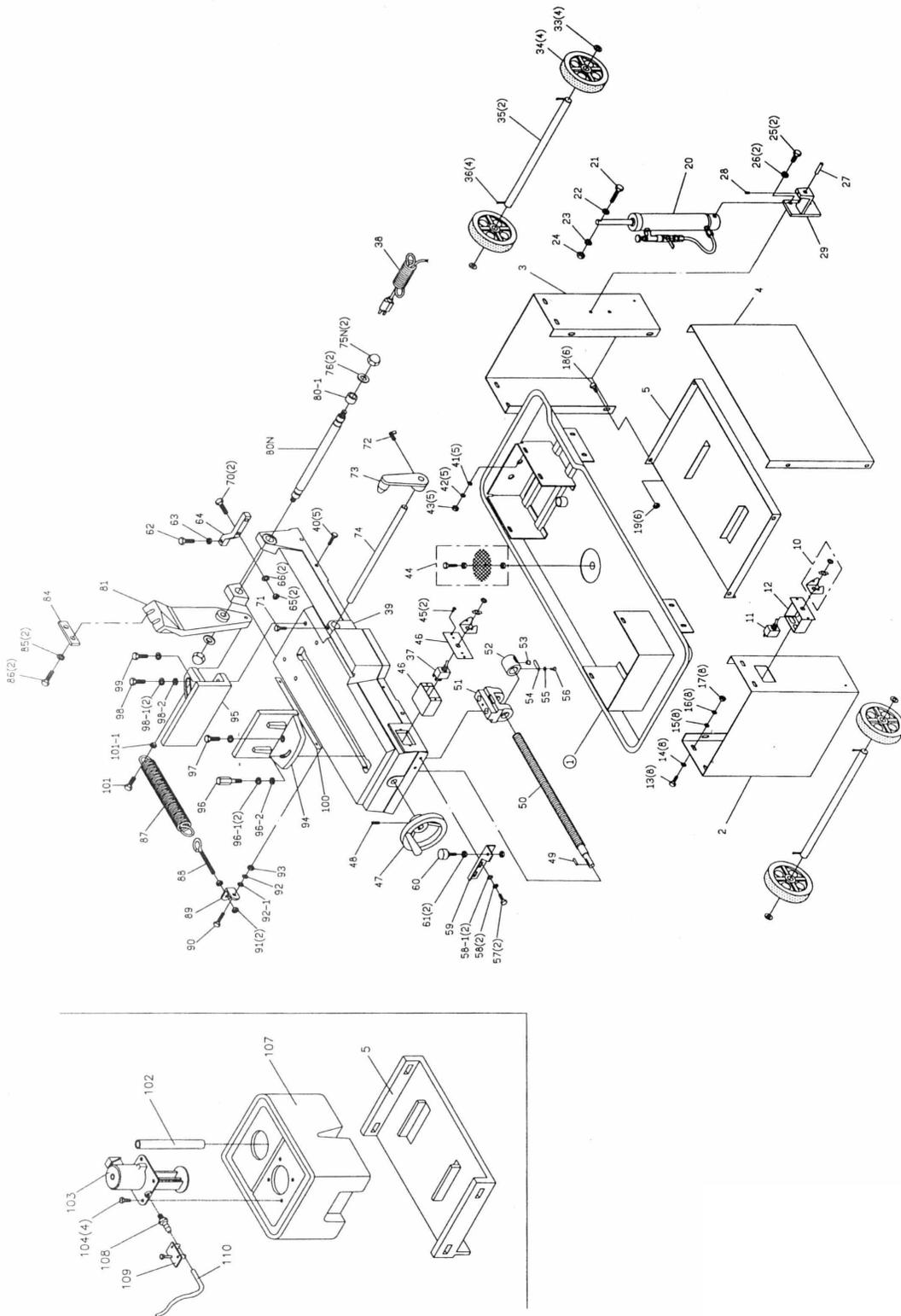
Part	Description	Qty.
117	Key	1
118	Ball Bearing	3
119	Hex Head Screw	1
119-1	Spring Washer	1
119-2	Washer	1
120	Oil Seal	1
121N	Gear Box	1
122	Spring Washer	4
123	Hex Head Screw	4
123-1	Adj. Screw	2
124	Blade Wheel (Lower)	1
125	Bearing Bushing	1
126	Hex Socket Screw	3
127	Saw Blade	1
128	Blade Back Cover	1
129	Wheel Cover	1
130	Plum Screw	2
130-1	Washer	2
131	Guide Adjusting Knob	2
132	Adjustable Bracket (Right)	1
133	Blade Guide Bearing	2
134	Blade Adjusting Seat	1
135	Bearing Pin	2
136	Eccentric Shaft	2
136-1	Center Shaft Assembly	2
137	Nut	4
137-1	Spring Washer	4
138	Washer	2
139	Spring Washer	2
140	Hex Socket Screw	1
141	Screw	2
142	Vertical Cutting Plate (Small)	1
143	Blade Adjusting Seat	1
144	Hex Head Screw	2
145	Top Support	1
146	Spring Washer	2
147	Nut	2
148	Round Head Screw	2
149	Washer	2
150	Brush Holder	1
151	Hex Head Screw	2
152	Nut	2
153	Brush	1
154	Hex Head Screw	3
154-1	Spring Washer	3
156	Nozzle	1
157	Set Screw	1
158	Nozzle Support	1
159	Valve	1
160	Round Head Screw	2
161	Hex Socket Screw	1
161-1	Spring Washer	1
163	Adjustable Bracket (Rear)	1

Part	Description	Qty.
164	Blade Guard	1
164-1	Round Head Screw	2
165	Hex Head Screw	4
166	Sliding Guide Plate	2
167	Set Screw	1
168	Hex Head Screw	2
169	Blade Tension Sliding Block	1
170	Hex Head Screw	1
170-1	Spring Washer	1
170-2	Washer	1
171	Sliding Draw Block	1
172	Bracket	1
173	Bearing Bushing	1
174	Ball Bearing	2
175	Blade Wheel (Upper)	1
176	Washer	1
176-1	Spring Washer	1
177	Hex Head Screw	1
178	Round Head Screw	2
179	Washer	2
180	Washer	1
181	Blade Tension Knob	1
182	Vertical Cutting Plate (Large)	1
183	Belt	1
184	Worm Pulley	1
185	Motor Pulley	1
186	Set Screw	3
187	Hex Head Screw	2
188	Washer	2
189	Pulley Cover	1
190	Thumb Screw	1
191	Key	1
192	Motor	1
193	Hex Head Screw	4
194	Motor Mount Plate	1
195	Washer	4
196	Spring Washer	4
197	Nut	4
198N	Worm Shaft Stopper	1
198-1	Set Screw	1
199	Ball Bearing	3
200	Block Plate	1
201	Oil Seal	1
202	Bearing Bushing	1
203N	Worm Shaft	1
203-1	Key	1
204	Hex Head Screw	2
205	Washer	2
206	Support Plate	1
213	Nut	1
214	Hex Head Screw	1
217	C-Ring	2

**NOTE:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

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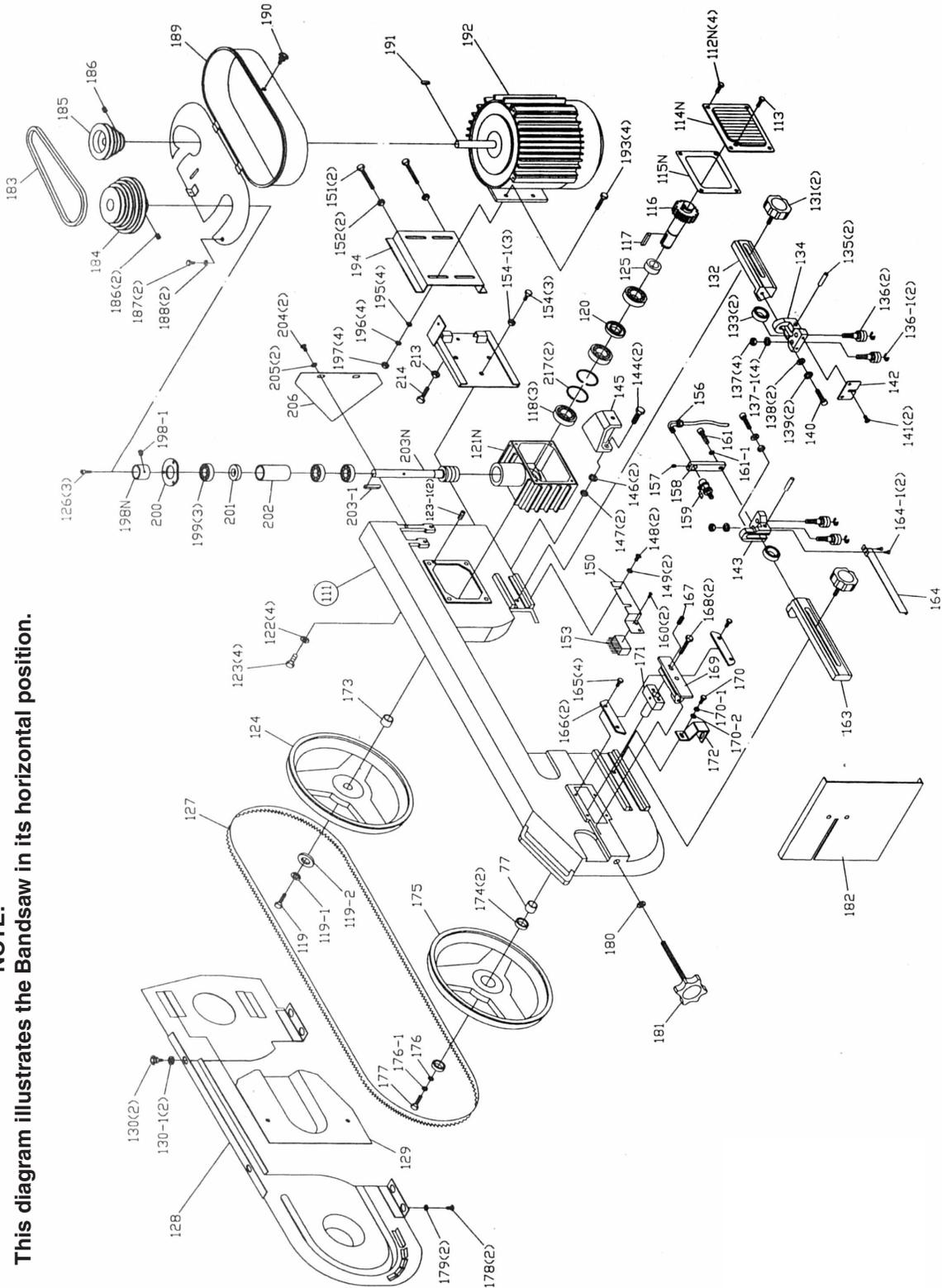
# ASSEMBLY DIAGRAM





# ASSEMBLY DIAGRAM (CONT.)

**NOTE:**  
This diagram illustrates the Bandsaw in its horizontal position.



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## WARRANTY

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### **CENTRAL MACHINERY**®

### **LIMITED 90 DAY/1 YEAR WARRANTY**

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser for a period of ninety days from date of purchase that the motor/engine, the belts (if so equipped), and the blades (if so equipped) are free of defects in materials and workmanship. Harbor Freight Tools also warrants to the original purchaser, for a period of one year from date of purchase, that all other parts and components of the product are free from defects in materials and workmanship. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents; repairs or alterations outside our facilities; or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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